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ABSTRACT

This paper presents suggested readings to aid instructors in honing their teaching skills. As a point of departure 20 IDEA Teaching Methods are used. Readings are divided into four categories: communicating content and purpose, involving students, creating enthusiasm, and preparing exams. Helpful material is suggested for specific topics within these categories. Areas covered include stating course objectives, demonstrating the importance of subject matter, motivating students, presenting material in a clear and organized way, helping students develop higher levels of thinking, developing classroom discussion, using alternative teaching strategies, fitting teaching methods to instructional goals and student needs, improving feedback to students, communicating enthusiasm for the subject, stimulating students' intellectual and emotional response to the material, planning the course, improving testing, improving essay, oral and performance exam items, and improving objective exam items. (Contains 35 references.) (JPB)

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Readings to Improve Selected Teaching Methods

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While most IDEA Papers have been written for faculty and administrators in higher education independent of using the IDEA System, this paper utilizes the 20 IDEA Teaching Methods items as its point of departure. Since there is considerable similarity in the items used—and the factors covered—in most student rating forms, it is hoped that these suggested readings will assist most colleges and universities, *not* just those using the IDEA System.

To help those who do not use IDEA, I will briefly discuss the factor analytic research on student rating items. This research has demonstrated that there is very considerable overlap in the items used on most student rating forms. Therefore, readers should be able to generalize from the IDEA items to similar items on their own forms.

Everyone agrees that student rating forms are *multidimensional*, because there are *several different aspects* to effective teaching. The multidimensional nature of student ratings has been reflected in a number of factor analytic studies (see Cohen, 1981; Feldman, 1976; and Kulik & McKeachie, 1975 for references). As few as two (Frey, 1978) or three (Feldman, 1976) factors have been suggested. Frey suggested that most student rating items dealt with either "Skill," e.g., presenting, or "Rapport," e.g., interacting with students. Feldman called Frey's Skill factor "Presentation"; Frey's Rapport factor, "Facilitation"; and added a third factor, "Regulation" related to testing, giving assignments, and the like. Most writers have suggested more factors. Frey's two factors were a summary of his basic seven factors: Organization/Planning, Presentation Clarity, Student Accomplishment, Class Discussion, Personal Attention, Grading/Exams, and Workload. Marsh (e.g., 1991) identified nine factors: Learning/Value, Enthusiasm, Organization/Clarity, Group Interaction, Individual Rapport, Breadth of Coverage, Exams/Grading, Assignments/Readings, and Workload/Difficulty. In one of his many reviews of the student rating literature, Feldman (1989) suggested that student rating items might logically be separated into as many as 28 different categories. (Readers interested in specific examples of items from these factors or categories should see the original references. Very often locally developed forms have many items covering presentation and exams, and few or no items on other factors.)

The IDEA Report divides the Teaching Methods items (Items 1-20) into four categories: Communicating Content and Purpose, Involving Students, Creating Enthusiasm, and Preparing Exams (other IDEA items cover student learning—Items 21-30, and difficulty and workload—Items 31-35, but will not be discussed in this paper). For those unfamiliar with the IDEA System, its Diagnostic Summary section lists specific Teaching Methods where improvement is more likely to help the students make greater progress on one or more of the course objectives. Then the instructor—taking into consideration the kind of course and the kinds of students—must look for ways of improvement related to that teaching method. Student rating items are the start of the instructor's journey toward improvement, not the end. Effective student rating items do *not* provide answers; they provide questions. The question should help the instructor focus on aspects of his or her teaching where change is more likely to lead to greater student learning.

The remaining sections of this paper will suggest readings for each of the 20 IDEA Teaching Methods. For each item, the students are asked to rate how frequently the instructor used the method, e.g., promoted teacher-student discussion. If you do not use the IDEA System, look for items on your form which are similar to the IDEA items, and are related to a teaching method that you are interested in improving.

Readings to Improve Communicating Content and Purpose

Using the factors discussed above as a frame of reference, these IDEA items overlap with Frey's (1978) Skill factor, with Feldman's (1976) Organization/Planning factor, and with Marsh's (1991) Organization/Clarity factor.

16. Clearly stated the objectives of the course.
8. Demonstrated the importance and significance of the subject matter.
18. Related course material to real life situations.

The first two items concern planning the course. Obviously you cannot clearly state the objectives of the course (Item 16) if you have not explicitly determined what your instructional goals are for that course. These in turn will relate to the importance of the subject matter (Item 8). Relating the course to real life (Item 18) is one of the most effective ways to demonstrate the significance of the subject matter.

Regarding clearly stating the objectives of the course, *read Angelo & Cross (1993), Ch. 2; Davis (1993), Chs. 1-2; Diamond (1989), entire book; Gronlund (1985), Chs. 1-5; Lowman (1984), Ch. 7; McKeachie (1994), Ch. 2; and Ryan & Martens (1989), entire book; also IDEA Paper No. 18 (Hanna & Cashin, 1987), and Hanna (1993), Chs 2-4.*

Regarding demonstrating the importance and significance of the subject matter and relating course material to real life. I cannot suggest any specific readings since this will vary with the academic field and with the level of the course. The one suggestion that I can make is that very often things about the subject matter—which are obvious to us as experts—are not even suspected by our students. It is our responsibility to make explicit the value of the material to our students. With today's vocationally oriented students, one of the most effective ways to do this is to use a variety of examples which relate the material to real life. For example, many students still object to taking writing or speech courses. It never occurs to many business majors or engineering majors—among others—that they will have to write letters and reports, and quite probably make formal presentations. As teachers we must make these things explicit.

The following are readings about **motivating students** which have some relevance to demonstrating the significance of the subject matter. *Read Eble (1988), Ch. 15; Davis (1993), Chs. 21-23; Fuhrmann & Grasha (1983), Chs. 3-5; and Lowman (1984), Ch. 3; McKeachie (1994), Ch. 31; also IDEA Paper No. 1 (Cashin, 1979).*

10. Made it clear how each topic fit into the course.
17. Explained course material clearly, and explanations were to the point.
14. Summarized material in a manner which aided retention.

These three items all deal with **presenting material in a clear and organized way**. This is still often done in lecture or presentations. Since readings relevant to one item often overlap with those relevant to another, I have combined the suggested readings. *For Items 10, 17, and 14, read Brown & Atkins (1988), Chs. 2-3; Davis (1993), Chs. 13-14, & 16; Eble (1988), Ch. 6; Erickson & Strommer (1991), Ch. 6; Lowman (1984), Ch. 5; McKeachie (1994), Ch. 5; also IDEA Paper No. 14 (Cashin, 1985) and No. 13 (Osterman, Christensen, & Coffey, 1985).*

Readings to Improve Involving Students

These IDEA items overlap with Frey's (1978) Rapport factor, with Feldman's (1976) Facilitation factor, and with Marsh's (1991) Group Interaction factor.

2. Found ways to help students answer their own questions.

The thrust of this item—in terms of Bloom's cognitive taxonomy (Bloom *et al.*, 1956; see also Gronlund, 1985)—is *not* on simple Knowledge and Comprehension, but on **helping students develop higher levels of thinking**: Application, Analysis, Synthesis, and Evaluation. *The following readings cover questioning techniques in general: Christensen (1991), Ch. 9; Davis (1993), Chs. 10-11; and Hyman (1980), Ch. 5; also IDEA Paper No. 8 (Hyman, 1982).*

1. Promoted teacher-student discussion (as opposed to mere responses to questions).
3. Encouraged students to express themselves freely and openly.
13. Encouraged student comments even when they turned out to be incorrect or irrelevant.

These three items are all concerned with **developing teacher-student, and student-student interaction**. The focus in many classes even though called discussion classes is on content. In such classes the instructor puts a premium on correct answers. Item 13 focuses on the fostering interaction. Used appropriately, students' mistakes and incorrect answers can lead to deeper and more enduring learning. *The following readings cover discussion techniques in general: Davis (1993), Chs. 8-9; Eble (1988), Ch. 7; Erickson & Strommer (1991), Ch. 7; Fuhrmann & Grasha (1983), Ch. 6; Hyman (1980), entire book; Lowman (1984), Ch. 6; McKeachie (1994), Ch. 4 & 15; also IDEA Papers No. 8 (Hyman, 1982), and No. 15 (Cashin & McKnight, 1986).*

5. Changed approaches to meet new situations.

Although the literature in general recommends that we include change and variety in our teaching to maintain student attention, this item is more concerned with **using alternative teaching strategies, and fitting teaching methods to instructional goals and to student needs**. The literature on student learning styles is most relevant to these concerns. *Read Davis (1993), Ch. 22; Erickson & Strommer (1991), Ch. 3; Fuhrmann & Grasha (1983), Chs. 3-5, & 10; McKeachie (1994), Ch. 32. For a review of the research on learning styles, read Claxton & Murrell (1987).*

11. Explained the reasons for criticisms of students' academic performance.

Ratings on this item reflect **the quality, quantity, and timeliness of the feedback we give our students**. It is a psychological truism that an effective way to improve people's performance is by giving them feedback on how well they are doing. Nevertheless, this is the lowest rated item of the IDEA Teaching Methods; a similar item is the lowest rated on another widely used student rating form. What this suggests is that we (college instructors) do a relatively poor job in giving students feedback on how well they are doing in our courses. Few authors have written much about the subject other than to say that we should return exams, papers, etc. quickly, *but read Fuhrmann & Grasha (1983), Ch. 7; and McKeachie (1994), Ch. 9. The references related to preparing exams cited below* also have some general recommendations. Although written for a different purpose, I suggest that many of the classroom assessment techniques can be adopted to provide students more useful feedback; *read Angelo & Cross (1993).* Finally, two references on giving feedback to faculty may also provide some hints to help our students: *Bergquist & Phillips (1975), Ch. 13; and Brinko (1993), entire article.*

Readings to Improve Creating Enthusiasm

These IDEA items overlap with Feldman's (1976) Presentation factor, and with Marsh's (1991) Enthusiasm factor.

4. Seemed enthusiastic about the subject matter.
7. Spoke with expressiveness and variety in tone of voice.
9. Made presentations which were dry and dull.

Item 4 is the highest rated item of the 20 IDEA Teaching Methods. This suggests that most of us, as instructors, do **communicate to our students our liking for our academic fields**. One major way this is accomplished is **the way we**

speak when teaching (Items 7 and 9). (Note that item 9—and items 6, 12, and 19 dealing with exams—are negative items where *low ratings are desirable*.) Almost every writing on improving lectures mentions the need for effective public speaking skills, but typically they offer few suggestions. *Read IDEA Paper No. 24 (Goulden, 1991); and Lowman (1984), Ch. 4; also Davis (1993), Ch. 13.*

15. Stimulated students to intellectual effort beyond that required by most courses.
20. Introduced stimulating ideas about the subject.

These two items are concerned with the **intellectual, and the affective or emotional, stimulation of the students**. As the result of taking a course, the student should have not only a better understanding of the subject matter, but the student should value and appreciate—if not like—the field. These aspects of teaching are not so much craft, nor even science, but of the art of teaching. As such they are not readily covered in a chapter. *Read Lowman (1984), Chs. 1-3* where he talks about both the cognitive and affective aspects of teaching, and *read Eble (1988), Chs. 1-3.*

The other readings I would suggest are those *readings cited above related to stating the objectives of the course.* If we are clear about what knowledge, skills, and attitudes we want our students to learn from a course, *and have a valid reason* ***why*** *they should learn them*, we will have the key to making our courses intellectually stimulating and challenging.

Readings to Improve Preparing Exams

These IDEA items overlap with Feldman's (1976) Regulation factor, and with Marsh's (1991) Exams/Grading factor.

6. Gave examinations which stressed unnecessary memorization.
12. Gave examination questions which were unclear.
19. Gave examination questions which were unreasonably detailed (picky).

Unclear exam questions (Item 12) can apply to any kind of test: essay, oral, and performance, as well as to so called "objective" exams. Stressing unnecessary memorization (Item 6) or unreasonable detail (Item 19) are more likely to be students' criticisms of "objective" questions.

The most fundamental way to better prepare exams is to **have a well planned course** (see readings for Item 16, above) **and then develop a *test plan* to insure that you test what you taught**. *Read Jacobs & Chase (1992), Ch. 1; Ory & Ryan (1993), Chs. 1-2; also Hanna (1993), Chs. 1-4.* Only after developing a test plan, should you **work to improve specific item types**.

To improve essay, oral, and performance items, *read Davis (1993), Ch. 31; Jacobs & Chase (1992), Chs. 6-7; McKeachie (1994), Ch. 6; Ory & Ryan (1993), Ch. 4; also IDEA Paper No. 17 (Cashin, 1987), and Hanna (1993), Chs. 7-8.*

To improve "objective" items, *read Davis (1993), Ch. 30; Jacobs & Chase (1992), Chs. 4-5; McKeachie (1994), Ch. 6; Ory & Ryan (1993), Ch. 3; also IDEA Paper No. 16 (Clegg & Cashin, 1986), and Hanna (1993), Chs. 5-6.*

Conclusion

It is my hope that the readings cited in this paper will help you improve your teaching. Most of the books have chapters on a wide variety of other aspects of college teaching which I also recommend to you. If I included a reading, it should be obvious that I consider it of value. However, if I have *not* cited a particular chapter, or omitted a book, readers should infer nothing about its value. There are some quality books which I have omitted because they overlap so much with those I have cited, or because they were less recent. Most of these are likely to be referenced in the books I have cited. It is also likely that there are some excellent books of which I am ignorant.

References

Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.

Bergquist, W. H., & Phillips, S. R. (1975). *A handbook for faculty development.* Washington, DC: Council for the Advancement of Small Colleges.

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: Handbook I, the cognitive domain.* New York: David McKay.

Brinko, K. T. (1993). The practice of giving feedback to improve teaching: What is effective? *Journal of Higher Education, 64,* 574-593.

Brown, G., & Atkins, M. (1988). *Effective teaching in higher education.* London: Methuen.

Cashin, W. E. (1979). *Motivating students.* IDEA Paper No. 1. Manhattan: Kansas State University, Center for Faculty Evaluation and Development. (ERIC Document Reproduction Service No. ED 202 409).

Cashin, W. E. (1985). *Improving lectures.* IDEA Paper No. 14. Manhattan: Kansas State University, Center for Faculty Evaluation and Development. (ERIC Document Reproduction Service No. ED 267 921).

Cashin, W. E. (1987). *Improving essay tests.* IDEA Paper No. 17. Manhattan: Kansas State University, Center for Faculty Evaluation and Development.

Cashin, W. E., & McKnight, P. C. (1986). *Improving discussions.* IDEA Paper No. 15. Manhattan: Kansas State University, Center for Faculty Evaluation and Development. (ERIC Document Reproduction Service No. ED 267-722).

Christensen, C. R. (1991). The discussion teacher in action: Questioning, listening, and response. In C. R. Christensen, D. A. Garvin, & A. Sweet (Eds.), *The artistry of discussion leadership* (pp. 153-172). Boston: Harvard Business School Press.

Claxton, C. S., & Murrell, P. H. (1987). *Learning styles: Implications for improving educational practices.* ASHE-ERIC Higher Education Report No. 4. Washington, DC: Association for the Study of Higher Education.

Clegg, V. L., & Cashin, W. E. (1986). *Improving multiple-choice tests.* IDEA Paper No. 16. Manhattan: Kansas State University, Center for Faculty Evaluation and Development.

Cohen, P. A. (1981). Student ratings of instruction and student achievement: A meta-analysis of multisection validity studies. *Review of Educational Research, 51,* 281-309.

Davis, B. G. (1993). *Tools of teaching.* San Francisco: Jossey-Bass.

Diamond, R. M. (1989). *Designing and improving courses and curricula in higher education: A systematic approach.* San Francisco: Jossey-Bass.

Eble, K. E. (1988). *The craft of teaching: A guide to mastering the professor's art* (2nd ed.). San Francisco: Jossey-Bass.

Erickson, B. L., & Strommer, D. W. (1991). *Teaching college freshmen.* San Francisco: Jossey-Bass.

Feldman, K. A. (1976). The superior college teacher from the students' view. *Research in Higher Education, 5,* 243-288.

Feldman, K. A. (1989). The association between student ratings of specific instructional dimensions and student achievement: Refining and extending the synthesis of data from multisection validity studies. *Research in Higher Education, 30,* 583-645.

Frey, P. W. (1978). A two-dimensional analysis of student ratings of instruction. *Research in Higher Education, 9,* 69-91.

Fuhrmann, B. S., & Grasha, A. F. (1983). *A practical handbook for college teachers.* Boston: Little, Brown.

Goulden, N. R. (1991). *Improving instructors' speaking skills.* IDEA Paper No. 24. Manhattan: Kansas State University, Center for Faculty Evaluation and Development.

Gronlund, N. E. (1985). *Stating objectives for classroom instruction* (3rd ed.). New York: Macmillan.

Hanna, G. S. (1993). *Better teaching through better testing.* Fort Worth: Harcourt Brace Jovanovich.

Hanna, G. S., & Cashin, W. E. (1987). *Matching instructional objectives, subject matter, tests, and score interpretation.* IDEA Paper No. 18. Manhattan: Kansas State University, Center for Faculty Evaluation and Development. (ERIC Document Reproduction Service No. ED 298 814).

Hyman, R. T. (1980). *Improving discussion leadership.* New York: Teachers College Press.

Hyman, R. T. (1982). *Questioning in the college classroom.* IDEA Paper No. 8. Manhattan: Kansas State University, Center for Faculty Evaluation and Development.

Jacobs, L. C., & Chase, C. I. (1992). *Developing and using tests effectively: A guide for faculty.* San Francisco: Jossey-Bass.

Kulik, J. A., & McKeachie, W. J. (1975). The evaluation of teachers in higher education. In F. N. Kerlinger (Ed.), *Review of research in education* (Vol. 3, pp. 210-240). Itasca, IL: F. E. Peacock.

Lowman, J. (1984). *Mastering the techniques of teaching.* San Francisco: Jossey-Bass.

Marsh, H. W. (1991). Multidimensional students' evaluations of teaching effectiveness: A test of alternative higher-order structures. *Journal of Educational Psychology, 83,* 285-296.

McKeachie, W. J. (1994). *Teaching tips: Strategies, research, and theory for college and university teachers.* (9th ed.). Lexington, MA: D. C. Heath.

Ory, J. C., & Ryan, K. E. (1993). *Tips for improving testing and grading.* Newbury Park, CA: Sage Publications.

Osterman, D., Christensen, M., & Coffey, B. (1985). *The feedback lecture.* IDEA Paper No. 13. Manhattan: Kansas State University, Center for Faculty Evaluation and Development.

Ryan, M. P., & Martens, G. G. (1989). *Planning a college course: A guidebook for the graduate teaching assistant.* Ann Arbor: University of Michigan, National Center for Research to Improve Postsecondary Teaching and Learning.

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